

## FIGURE 1A

### CHIR 12.12 light chain:

leader:

MALPAQLLGILLMLWVSGSSG

variable:

DIVMTQSPLSLTVPGEPAISCRSSQSLLYSNGYNYLDWYLQKPGQSPQVLISLGSNRASG  
VPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQARQTPFTFGPGTKVDIR

constant:

RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK  
DSTYLSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

## FIGURE 1B

### CHIR-12.12 heavy chain:

leader:

MEFGLSWVFLVAILRGVQC

variable:

QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVAVISYEESNRYHAD  
SVKGRFTISRDN SKITLYLQMNSLRTEDTAVYYCARDGGIAAPGPDYWGQGLTVTVSS

constant:

ASTKGPSVFPLAPASKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL  
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVF  
LFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVV  
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL  
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSV  
MHEALHNHYTQKSLSLSPGK

alternative constant region:

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL  
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVF  
LFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVV  
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL  
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSV  
MHEALHNHYTQKSLSLSPGK

## FIGURE 2A

DNA sequence of light chain of CHIR-12.12:

5'atggcgctccctgctcagctcctggggctgctaagtctctgggtctctggatccagtggggatattgtgatgactcagctccactctc  
cctgaccgtcacccctggagagccggcctccatctcctgcaggtccagtcagagcctcctgtatagtaatggatacaactatttgattg  
gtacctgcagaagccagggcagctccacaggtcctgatctcttgggttctaatacgggcctccggggctccctgacaggttcagtggca  
gtggatcaggcacagattttacactgaaaatcagcagagtggaggctgaggatgttgggtttattactgcatgcaagctcgacaaact  
ccattcactttcgccctgggaccaaagtggatatcagacgaactgtggtgcacatctgtctcattctcccgccatctgatgagcagt  
tgaaatctggaactgcctctgttgtgctgctgaataactctatcccagagaggccaaagtacagtggaggtggataacgccctcc  
aatcgggtaactcccaggagagtgtcacagagcaggacagcaaggacagcacctacagcctcagcagcacctgacgctgagcaa  
agcagactacgagaacacaaagtctacgctgcgaagtcccatcagggcctgagctcggccgtcacaagagcttcaacaggg  
gagagtgttag3'

## FIGURE 2B

DNA sequence of heavy chain of CHIR-12.12 (including introns):

5'atggagtttgggctgagctgggtttccttgttgcattttaagaggtgtccagtgtcaggtgcagttggtggagctcggggaggcgt  
ggtccagcctgggaggtccctgagactctcctgtgcagcctctggattcaccttcagtagctatggcatgactgggtccgccaggctc  
caggcaaggggctggagtgggtggcagttatcatatgaggaaagtaatagataccatgcagactccgtgaaggggccgattcacca  
tctccagagacaattccaagatcacgctgtatctgcaaatgaacagcctcagaactgaggacacggctgtgtattactgtgcgagagat  
gggggtatagcagcacctgggcctgactactggggccagggaacctgtgtcaccgtctcctcagcaagtaccaaggggccatccgt  
ctccccctggcggccgtgacgaagagcacctctgggggcacagcgccctgggctgcctgggtcaaggactacttccccgaaccgg  
tgacggtgtcgtggaactcaggcgccctgaccagcggtgcacacctcccggctgtcctacagtcctcaggacttactcctcag  
cagcgtggtgaccgtgccctccagcagcttgggcacccagacctatctgcaacgtgaatcacaaagcccagcaacaccaagggtg  
acaagagagttggtgagaggccagcacaggaggagggtgtctgtggaagccaggctcagcgtcctgcttgacgcatccc  
gctatgcagtcaggccagcaaggcagggccctgtgcctcttcacccggaggcctctgcccggccactcatgtcagg  
gagagggtcttctggcttttccccaggctctgggcaggcacaggctaggtgcccctaaccaggccctgcacacaaaggggcagg  
gctgggctcagacctgccaagagccatatccgggaggacctgcccctgacctaaagccacccaaaggccaaactctccactccc  
tcagctcggacaccttctcctcccagattccagtaactcccaatcttctctgcagagcccaaatctgtgacaaaactcacacatgc  
ccaccgtgcccaggtgaagccagcccaggcctgcacctcagctcaaggcgggacaggtgccttagagtagcctgcatccagggac  
aggccccagccgggtgctgacacgtccacctcatcttctcctcagcacctgaactcctggggggaccgtcagcttctcttcccccc  
aaaacccaaggacacctcatgatctcccggacctctgaggtcacatgcgtggtggtggacgtgagccacgaagacctgaggtca  
agtccaactggtacgtggacggcgtggaggtgcataatccaagacaaagccgaggaggagcagtacaacagcacgtaccgtgt  
ggtcagcgtcctcaccgtctgcaccaggactggtgaatggcaaggagtacaagtgaaggctccaacaagccctcccagccc  
ccatcgagaaaacctctccaaagccaaaggtgggacctgggggtgcgagggccacatggacagaggccggctcgccacccc  
tctgcccgtgagagtaccgtgtaccaacctctgtccctacagggcagccccgagaaccacaggtgtacacctgccccatcccgg  
gaggagatgaccaagaaccaggtcagcctgacctgctggtcaaaggcttctatcccagcgacatcgccgtggagtgggagagcaa  
tgggcagccggagaacaactacaagaccacgctcccgtgtgactccgacggtccttcttctctatagcaagctaccgtggac  
aagagcaggtggcagcagggaacgtcttctcatgtcctgtatgcatgaggctctgcacaaccactacgcagaagagcctctcc  
ctgtctccgggtaaatga3'

## FIGURE 3A

### CHIR-5.9 light chain:

leader:

MALLAQLLGLLMLWVPGSSG

variable:

AIVMTQPPLSSPVTLGQPASISCRSSQSLVHSDGNTYLNWLQQRPGQPPRLLIYKFFRRLSG  
VPDRFSGSGAGTDFTLKISRVEAEDVGVYYCMQVTQFPHTFGQGRLEIK

constant:

RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK  
DSTYLSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

## FIGURE 3B

### CHIR-5.9 heavy chain:

leader:

MGSTAILALLLAVLQGVCA

variable:

EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWIGWVRQMPGKGLEWMGIIYPGDS DTRYSP  
SFQGGQVTISADKSISTAYLQWSSLKASDTAMYICARGTAAGR DYYYYYGMDVWGQGTTTVTVS  
S

constant:

ASTKGPSVFPLAPASKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL  
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVF  
LFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVV  
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL  
TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFV  
MHEALHNHYTQKSLSLSPGK

alternative constant region:

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL  
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVF  
LFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVV  
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL  
TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFV  
MHEALHNHYTQKSLSLSPGK

## FIGURE 4A

Coding sequence for short isoform of human CD40:

```
1 atggttcgtc tgcctctgca gtgcgtcctc tggggctgct tgctgaccgc tgccatcca
61 gaaccaccca ctgcatgcag agaaaaacag tacctaataa acagtcagtg ctgttctttg
121 tgccagccag gacagaaact ggtgagtgac tgcacagagt tcaactgaaac ggaatgcctt
181 ccttgcggtg aaagcgaatt cctagacacc tggaacagag agacacactg ccaccagcac
241 aaatactgcg accccaacct agggcttcgg gtccagcaga agggcacctc agaaacagac
301 accatctgca cctgtgaaga aggctggcac tgtacgagtg aggcctgtga gagctgtgtc
361 ctgcaccgct catgctcgcc cggtttggg gtcaagcaga ttgctacagg ggtttctgat
421 accatctgcg agccctgccc agtgggcttc ttctccaatg tgcatctgc tticgaaaaa
481 tgcaccctt ggacaaggtc cccaggatcg gctgagagcc ctggtgtgta tccccatcat
541 ctcgggcatc ctgttgcca tcctcttggt gctggtcttt atcaaaaagg tggccaagaa
601 gccaaccaat aa
```

## FIGURE 4B

Encoded short isoform of human CD40:

```
1 mvrplqcvl wgclltavhp epptacrekq ylinsqccsl cpggqlvds cteftetecf
61 pcgesefldt wnrethchqh kyedpnlgr vqqkgtsetd tictceegwh ctseacescv
121 lhrscspgfg vkqiatgvds ticepcpvgf fsnvssafek chpwtrspgs aespqgdphh
181 lrdpvchplg aglyqkqqe anq
```

## FIGURE 4C

Coding sequence for long isoform of human CD40:

```
1 atggttcgtc tgcctctgca gtgcgtcctc tggggctgct tgctgaccgc tgcctatcca
61 gaaccaccca ctgcatgcag agaaaaacag tacctaataa acagtcagtg ctgttctttg
121 tgccagccag gacagaaact ggtgagtgac tgcacagagt tactgaaac ggaatgcctt
181 ccttgccgtg aaagcgaatt cctagacacc tggaacagag agacacactg ccaccagcac
241 aaatactgcg accccaacct agggcttcgg gtccagcaga agggcacctc agaaacagac
301 accatctgca cctgtgaaga aggctggcac tgtacgagtg aggcctgtga gagctgtgtc
361 ctgcaccgct catgctcgcc cggctttggg gtcaagcaga ttgctacagg ggtttctgat
421 accatctgcg agccctgccc agtcggcttc ttctcaatg tgcatctgc ttctgaaaaa
481 tgtcacctt ggacaagctg tgagacaaa gacctggttg tgcaacaggc aggcacaaac
541 aagactgatg ttgtctgtgg tcccaggat cggctgagag ccctggtggt gatcccatc
601 atcttcggga tctgtttgc catcctcttg gtgctggtct ttatcaaaa gttggccaag
661 aagccaacca ataaggcccc ccacccaag caggaacccc aggagatcaa tttcccgac
721 gatcttctg gtccaacac tgctgtcca gtgcaggaga ctttacctg atgccaaccg
781 gtcaccagg aggatggcaa agagagtcgc atctcagtc aggagagaca gtga
```

## FIGURE 4D

Encoded long isoform of human CD40:

```
1 mvrplqcvl wgclltavhp epptacrekq ylinsqccsl cpggqklvsd cteftetcl
61 pcgesefldt wnrethchqh kyedpnlgrr vqqkgtsetd tictceegwh ctseacescv
121 lhrscspgfg vkqiatgvsd ticepcpvgf fsnvssafek chpwtscetk dlvvqqagtn
181 ktdvvcgpd rlravvupi ifgilfaill vlvfikkvak kptnkaphpk qepqeinfpd
241 dlpgsntaap vqetlhgcqp vtqedgkesr isvqerq
```

**FIGURE 5**

